

NAVAL WAR COLLEGE  
Newport, RI

Five Precepts for the Air Component Commander  
When Air Power is Used in Coercive Diplomacy

by

Maurice H. Forsyth  
Colonel, United States Air Force

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

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17 May 1999



Commander Angus K. Ross  
Faculty Advisor

DTIC QUALITY INSPECTED 4

19991122 130

## REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Five Precepts for the Air Component Commander When Air Power is Used in Coercive Diplomacy (Unclassified)			
9. Personal Authors: COL MAURICE H. FORSYTH, USAF			
10. Type of Report: FINAL		11. Date of Report: 17 MAY 1999	
12. Page Count: 27			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Coercive diplomacy, Air Power, Air Component Commander, Bosnia, Persian Gulf War, General Ryan, Air Superiority, Targeting, Information Warfare, Coalitions, Psychological Operations			
<b>15. Abstract:</b> <p>Unquestionably, air power brings to bear some unique capabilities that no other military force can, particularly when used as a coercive diplomacy tool. To be used effectively though, a rational calculus needs to take place that considers air power's strengths as well as its weaknesses. Consideration of both sides of this equation is essential for the success of any air operation.</p> <p>With air power's increased use in this way, it is essential that the air component commander be as well versed as possible in this "new" mission. Too often, in today's age of crisis management, the operational commander has had to "wing it" in his attempt to use air power effectively and correctly in this, very dynamic, political context.</p> <p>An examination of a few recent case studies to determine what works, as well as to identify those possible instances where air power might not have been the correct military choice or was employed incorrectly, has produced a list of five precepts--principles that prescribe a particular course of action or conduct--that attempt to give the air component commander a baseline for planning. It is equally important that the air component commander advise the leadership of the possible risks where air power might not be the appropriate tool to use. These precepts are by no means all inclusive nor are they meant to be a definitive answer as additional lessons are being written right now in air operations abroad.</p>			
16. Distribution / Availability of Abstract:	Unclassified  X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

## Abstract

Unquestionably, air power brings to bear some unique capabilities that no other military force can, particularly when used as a coercive diplomacy tool. To be used effectively though, a rational calculus needs to take place that considers air power's strengths as well as its weaknesses. Consideration of both sides of this equation is essential for the success of any air operation.

With air power's increased use in this way, it is essential that the air component commander be as well versed as possible in this "new" mission. Too often, in today's age of crisis management, the operational commander has had to "wing it" in his attempt to use air power effectively and correctly in this very dynamic political context.

An examination of a few recent case studies to determine what works, as well as to identify those possible instances where air power might not have been the correct military choice or was employed incorrectly, has produced a list of five precepts—principles that prescribe a particular course of action or conduct—that attempt to give the air component commander a baseline for planning. It is equally important that the air component commander advise the leadership of the possible risks where air power might not be the appropriate tool to use. These precepts are by no means all inclusive nor are they meant to be a definitive answer as additional lessons are being written right now in air operations abroad.

## I. INTRODUCTION

*"The nature of the enemy and the war, the objectives to be achieved, and the price people are willing to pay determine what military instruments will be employed and in what proportion."*

Colonel Phillip S. Meilinger<sup>1</sup>

Early air power theorists were often ridiculed and derided for what at the time were considered the unrealistic claims of air power. Frequently the gibes they received were more a result of the air power means of the time not living up to their predicted capabilities. General Billy Mitchell said, "Those of us in the air have a vision of the future which we believe to be unquestionably correct. Now is the time for us to weigh carefully the evidence of the last war and prepare for any contests that may come in the future."<sup>2</sup> Today we are much more fortunate than General Mitchell because, while air power is still in its youth compared to the other arms of warfare, we have many more historical perspectives from which we can begin to draw meaningful conclusions. Much of the recent success of air power, which General Mitchell foretold in 1928, is in large part due to the fact that the "means to ends" disconnect has largely been bridged through the astonishingly rapid advances in scientific and aerospace technology. Today many air power aficionados sense that air power is finally becoming capable of living up to its true potential.

Whether air power has finally come of age or not, there can be no doubt that tactically its combination of speed, range, elevation and flexibility make it *sui generis*. It is these qualities, along with its promise of lethality, swiftness of response, and relatively low risks, that make it an attractive military force for the political and diplomatic community.

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<sup>1</sup> Philip S. Meilinger, "Ten Propositions Regarding Airpower," Air Power Journal, Spring 1996, 52.

<sup>2</sup> William Mitchell, Memoirs of World War I (New York: Random House 1928), 6.

Nevertheless, to be used effectively as a political tool by the operational commander, a rational calculus needs to take place that considers air power's limitations as well. Contemplation of both sides of the equation for each particular, unique situation is essential to the success of any air operation.

Although in most instances ground and sea elements of the military would unquestionably aid in the successful conclusion of a conflict, one can never completely depend on their presence or participation. Rightfully so, political and social wills of the nation and those of the allied or host nations will take precedence. It is therefore prudent to conceive a plan that gives the best chance of success when air power is compelled to be used autonomously, all the while mindful of the difficulty of this situation.

Like many issues associated with air power, this coercive use has thrust the operational commander into largely uncharted waters, not unlike those of General Mitchell's time. However, with the help of history and an eye to the present situation in Europe, we can confidently calculate a formula that will help ensure air power's unique and powerful capabilities are used to their best advantage.

### Terms Defined

"Air power is the ability to do something in or through the air, and, as the air covers the whole world, aircraft are able to go anywhere on the planet."<sup>3</sup> This definition of *air power* may have been sufficient for General Mitchell in 1924, but when spoken of today, air power means much more. For the purposes of this paper, *air power* represents the quiver that holds all the arrows of strength that are employed from or through the medium of air. These "arrows" include aircraft from all of the different services and allied forces as well as certain

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<sup>3</sup> William Mitchell, "Aeronautical Era," The Saturday Evening Post, 20 December 1924.

long-range weapons like cruise missiles. For the sake of clarification, it will not however, include artillery, MLRS (Multiple-Launch Rocket Systems), ATACMS (Army Tactical Missile Systems), or naval shore bombardment. These weapons in most cases cannot and were not designed to have the range to strike an enemy's center of gravity from friendly territory and therefore cannot normally hold an entire country at risk. Also, for the purposes of this paper we will not be concerned with nuclear weapons since, for the most part, their use by any country against another would imply a world war situation, at which point coercive diplomacy would not be an issue. In short then, for the construct of this discussion, *air power* is any conventional military power that can through the use of the medium of air hold the enemy's entire country and treasures at risk.

What then is *coercive diplomacy*? It is difficult to find a direct definition of the phrase. Nevertheless, to help us come to a workable solution we can get a feel for the phrase by examining the terms singularly. One definition of *coercion* says it is "the use of force either to compel the enemy to cease an action or to deter him from starting one. Coercion requires that the enemy make a conscious decision to quit prior to complete military defeat, while he still has an option to continue military resistance."<sup>4</sup>

The second part of the phrase is diplomacy. No doubt there are numerous definitions from which to choose but according to Webster's dictionary *diplomacy* is "the art and practice of conducting negotiations between nations; skill in handling affairs without arousing hostility."<sup>5</sup>

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<sup>4</sup> Scott Walker, "A Unified Field Theory of Coercive Airpower," *Airpower Journal*, Summer 1997, 71. This quote on coercion from Walker's paper was not quoted from but footnoted in reference to the following book: Thomas Schelling, "Arms and Influence," New Haven, Conn.: Yale University Press, 1966, 4-5.

<sup>5</sup> *Webster's New American Dictionary*, New York: Smithmark, 1995, 147.

Taking these two definitions and combining them in the context of this paper, *coercive diplomacy* will be defined as the use of air power as a military arm of our nation's power to bring about a change in another nation, state, or organization. In its initial stages it may, and in most cases hopefully will, be just the threat of the first use of this force employed in conjunction with the nation's economic and diplomatic tools. Ultimately though, if challenged, one must be ready and willing to unabashedly employ air power in a first use of force to emphatically and decisively pressure the enemy to submit to change.

It is at this point where the nexus of this paper will focus--the use of overwhelming violence from the air, in a scenario the politicians would probably characterize as less than war, to compel the enemy to do our will. The characterization of an operation less than war is not meant to infer that such use of force won't ultimately lead to a commitment of long-term presence. On the contrary, our continued presence over the skies of Iraq and Bosnia remind us of past long term commitments like those in Korea.

## II. SUCCESSFUL APPLICATIONS OF AIR POWER

*"Once a nation has been conquered in the air it may be subjected to such moral torture that it would be obligated to cry 'Enough' before the war could be decided upon the surface."*

Giulio Douhet<sup>6</sup>

Certainly there are many instances where a nation has used air power in an attempt to coerce another nation to succumb to its will. Unfortunately, in many of these instances, its first use was subsequently overshadowed by the ensuing ground conflict and therefore

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<sup>6</sup> Giulio Douhet, The Command of the Air, translated by Dino Ferrari (Washington, D.C.: Office of Air Force History, 1983), n.p.n.

appropriate conclusions as to the real value of air power were not drawn. Of course one of the most recent examples was the use of air power employed by the coalition during the Persian Gulf war. In many ways this war was a foreshadowing of future diplomatic maneuvers because while still somewhat overshadowed by the "100 hour war"<sup>7</sup> perception, many believe it was the first time air power was given a chance to finally achieve its predicted results.

### Persian Gulf Conflict

Many would argue that the Gulf War was an aberration in warfare and that the study of it should either not be done at all or at the very least looked at with a heavy dose of skepticism. It is true that, as far as the employment of air power is concerned, many conditions were ideal. The terrain could probably not have been better for both air forces and ground forces. As it turned out, the opposition leadership proved not to be the most capable foe either. Nevertheless, to argue that this was not a rigorous test of air power would be to ignore many significant facts. The extensive air defense systems the Iraqis had in place at the time rivaled the best in the world. The harsh weather conditions that the coalition was forced to fly in and endure were all new to the United States. Finally, the sheer magnitude of planning, scheduling and flying nearly 65,000 combat sorties from all four services of the United States and seven different coalition countries, all of whom had different tactics and procedures, and still end up with an attrition rate of only 0.05, cannot be overlooked or downplayed.<sup>8</sup>

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<sup>7</sup> Michael R. Gordon and Bernard E. Trainor, The Generals War, (Boston: Little, Brown and Company, 1995), 423-424. An example of the discussion by senior leadership about "the war" lasting only 100 hours when in fact it was only the ground offensive that lasted 100 hours.

<sup>8</sup> Eliot A. Cohen and others, "Volume 5: Statistical Compendium and Chronology," Gulf War Air Power Survey, (Washington D.C.: U.S. Government Printing Office, 1993), 651.



This conflict presented many new and welcome characteristics for the coalition air commander. Allowing "airmen" to plan and execute a complete "air campaign"<sup>9</sup> ensured the coalition forces of air supremacy, which in the long run allowed for parallel<sup>10</sup> targeting on all three levels of war: strategic, operational, and tactical. Air supremacy, or at least air superiority, is a fundamental requirement for success in any conflict now or in the future. And while air superiority is no guarantee of success, failure is nearly certain without it. Air superiority allowed the coalition's aircraft and weapons to be used to their full potential, especially with respect to precision engagement and lethality. It also enabled the coalition to psychologically take the fight to the entire Iraqi country. While the psychological aspect is difficult to measure, its importance cannot and must not be discounted.

In short, the latitude allotted to the air campaign planners saved many, many lives. Once the first bombs were dropped, the Iraqi forces were paralyzed and vulnerable to attack. The ability for us to control the enemy in this fashion was a direct result of the superior planning, training, and technology of the United States-led coalition.

It is also important to note that in terms of days, the time used for prosecution of the air campaign was relatively short.<sup>11</sup> Before the ground offensive started, it took only 39 days

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<sup>9</sup> The dominant role of air power in the Persian Gulf War has led to the common use of the term "air campaign" when describing the exclusive use of air power. Today the term air campaign has been used in reference to the Kosovo conflict by the President, Secretary of Defense, Chairman of the Joint Chiefs of Staff and even most recently by the JMO Professor Milan Vego in a 6 May 1999 New York Times article. (Milan Vego, "The Non-Embargo," The New York Times, 6 May 1999, A31:2.)

<sup>10</sup> The term "parallel warfare" was coined by the Air Force Directorate of Warfighting Concepts Development (AF/XOXW). It first came into use immediately after the Gulf War. For a more in depth discussion, see (David Deptula, "Firing for Effect: Change in the Nature of Warfare," Aerospace Education Foundation, n.d.) or (Richard Szafranski, "Battlefield of the Future, Chapter 5: Parallel War and Hyperwar: Is Every Want a Weakness?" Airpower Journal, Summer 1998.)

<sup>11</sup> It is a largely held belief that the air campaign took longer than expected. In reality the initial planning depicted anywhere from 9 to 19 days. What is not considered in these figures is the fact that the weather was much worse than predicted and the target list increased two fold in the immediate days before the commencement of INSTANT THUNDER. ((Eliot A. Cohen and others, "Volume 1: Planning and Command and Control," Gulf War Air Power Survey, (Washington D.C.: U.S. Government Printing Office, 1993), 8.))

to nearly decimate the Iraqi forces and their will to fight.<sup>12</sup> This allowed coalition ground forces to move with the speed and efficiency heretofore never seen. As a point of reference, up until the Persian Gulf Conflict, the Spanish American War that officially lasted four months was the shortest war the United States had ever been involved in. Additionally, the average length of all nine of the previous United States conflicts was three years and seven months. Therefore, to put this all in perspective, the Gulf conflict was 2.72 times shorter than the previously shortest war and nearly 30 times shorter than the average of all United States conflicts! Consequently one may deduce that, under certain circumstances, the efficient use of air power can shorten the length of the conflict and can dramatically reduce casualties. These two traits make its use very desirable for the politicians since civilians now expect our wars to be won quickly, decisively, with overwhelming advantage and few casualties.

### Bosnia

Between 30 August and 14 September 1995, the North Atlantic Treaty Organization (NATO) conducted an air campaign called Operation DELIBERATE FORCE—technically, just a phase of Operation DENY FLIGHT, a United Nations backed operation that had

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<sup>12</sup> Saddam Hussein thought there would be one to two weeks of bombing and then a ground offensive where he hoped many Americans would be coming home in body bags. A sight he thought the American public would not stand for. But the situation turned out to be worse than expected, and when he visited the front on 27 January, he realized that things were really bad. He personally approved of the al-Khafji plan hoping for a morale boost but instead things just got worse. On 12 February Hussein started asking Primakov practical questions indicating he was considering a withdrawal. Then the al-Firdos bombing happened, and Hussein realized that the U.S. was getting personal. Within two days he announced publicly the possibility of withdrawal. These are clear indications of Hussein looking for a way out, but with downtown Baghdad being put off the target list, he finds enough confidence to haggle on about details. Not until 22 February did the Iraqi and Russian leadership agree on conditions for withdrawal, and Hussein and Tariq Aziz felt it had to be approved by the US. Hussein was so sure he was going to withdraw now that he ordered the destruction of oil wells in Kuwait. Surprised to learn that the U.S. did not accept the terms, and given that a ground offensive had started he had to give it symbolically enough time to show that there had been a fight. But not so long that they would be completely devastated. He chose to order the withdrawal on 26 Feb, and by then most of his troops had already prepared for it, or were already gone. One can only speculate what would have happened if we had continued bombing downtown Baghdad—putting more pressure on Hussein at that critical point in time.

controlled the air space over Bosnia since 31 March 1993.<sup>13</sup> Operation DELIBERATE FORCE was NATO's coercive effort to stop the Bosnian Serb Army—specifically General Mladic—from killing the Croat-Muslim Bosnians and assimilating newly-independent Bosnia. Specifically, NATO demanded an end to the attacks and the withdrawal of heavy weapons from around Sarajevo.

Planning for this air campaign was slowed and in fact the entire operation was hampered in the beginning because of the unanimous consensus that was required by all of the NATO countries for nearly every decision. Initially, this created what was a huge impediment, but in the long run, with the additional backing of the United Nations, it proved to be a solidifying force that was able to speak powerfully with one international voice to General Mladic and the President of the former Yugoslavia, Slobodan Milosevic.

Timing was also a critical factor with respect to the flow of the air campaign. Only two days after the bombings began, British Lieutenant General Bernard Janvier, commander of United Nations forces in the former Yugoslavia, in response to General Mladic's veiled pledge to lift the siege of Sarajevo and remove his heavy weapons from the exclusion zone ringing the city, unilaterally agreed to suspend the bombings for at least 96 hours. Rightfully so, NATO's supreme commander General Joulwan was very upset and said, "it was like snatching defeat from the jaws of victory."<sup>14</sup> The pause ended up lasting just over 105 hours before it was resumed with an expanded targeting list and renewed vigor.<sup>15</sup> To many Americans this type of halt to the bombings brought back bitter memories of the conflict in

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<sup>13</sup> Robert C. Owen, "The Balkans Air Campaign Study: Part 1," Airpower Journal, Summer 1997, 9.

<sup>14</sup> Rick Atkinson, "How the Western Alliance Paused and Came of Age," The Washington Post National Weekly Edition, November 27 – December 3, 1995, 8.

<sup>15</sup> *Ibid.*

Vietnam. Indeed it proved to be a ploy by General Mladic to allow him to move forces into further cover. Fortunately, in the long run this did not play a large part in the ultimate outcome, but deserves some recognition as to the pitfalls of coalition warfare and the terrible memories of air power being used by non-airmen in the worst of ways.

After the delay, the target list was expanded to include more strategic targets. This allowed the coalition to keep the pressure on while negotiations were taking place. In the long run, this targeting philosophy would permeate the rest of the air campaign's targeting priorities and would lead to few casualties on both sides and the eventual desired immediate political outcome. One other important point is that this targeting philosophy works best on an enemy whose country is more modern or industrialized because striking unmanned strategic targets like electrical grids keeps the casualties down but still pressure the leadership.

Keeping those casualties and collateral damage to a minimum was key to the overall operation whose success was rooted in the effective use of precision weapons. The role precision weapons played in this campaign cannot be overlooked or overstated. So critical was it that the correct target and DMPI (Desired Mean Point of Impact) was struck that the Joint Forces Air Component Commander and Commander of AIRSOUTH, General Ryan, personally oversaw the selection of every target, the type of weapon used, the strike times, and even the selection of bombing routes. While this type of tactical oversight by the operational commander was very unusual, it underscored the importance of the political ramifications of every mission. It was General Ryan's and Admiral Leighton Smith's contention that every bomb was a "political bomb"<sup>16</sup> "Ryan knew that a single mistake—

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<sup>16</sup> Robert C. Owen, "The Balkans Air Campaign Study: Part 2," Airpower Journal, Fall 1997, 3.

bombing a church, strafing a school bus—would cause public opinion to bring DELIBERATE FORCE to a dead stop.”<sup>17</sup>

General Ryan’s unique awareness of the political environment, the will of the people, and the power of the press with respect to information flow made him a major key to the success of the air campaign. The information war in this conflict played as big a role as any bomb. The smart employment of that information proved to be a huge consideration in planning. Its importance was probably second only to limiting allied losses.

Taken all together, the psychological aspects caused by the accurate assessment and targeting of a country’s center of gravity eventually caused Yugoslavia to agree to the free world’s political will. Skillful targeting and the psychological aspects of air power are just two reasons why it is seen as such an effective tool in coercive diplomacy. In addition to these, the effective use of information warfare, a strong coalition partnership, and air superiority will allow the air component commander to develop a comprehensive and successful air campaign.

### III. IMPROPER APPLICATIONS OF AIR POWER

*“In England, before the establishment of their department of the air, [air] regulation was turned over to the British Board of Trade and it is said that one of the first regulations they made was that when two airplanes met each other in the fog they should blow their fog horns! There were other rules almost as ludicrous as this, because the work was being done by men untrained in air matters.”*

General William “Billy” Mitchell<sup>18</sup>

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<sup>17</sup> Rick Atkinson, “With Deliberate Force in Bosnia,” The Washinton Post National Weekly Edition, November 27 – December 3, 1995, 7.

<sup>18</sup> William Mitchell, Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military, 1925; reprint (New York: Dover Publications, Inc., 1988), 93.

There are times when air power is not the answer. It is during those times that the air component commander needs to lose any parochial feelings he might have and inform the political leadership of the real capabilities and limitations of air power in a given situation. Without this forthright honesty, we will find ourselves in casualty ridden situations like Desert One—the aborted attempt to rescue the American hostages in Iran.

Many of the other United States military actions in the recent past have exhibited those instances when ground or naval forces constitute the best course of action. Certainly, the use of naval forces in the re-flagging operations in the Persian Gulf and the use of ground and naval forces in the conflicts in Granada, Panama, Haiti, and Somalia prove this to be true. It is important to note however that in nearly every military operation, no matter how big or small, every single service brings some unique capability to the fight. In the case of air power, it may be in support of ground forces with special operations aircraft like the AC-130 gun-ships. Other times air power might play a role in just delivering troops or supplies by air. What is important to remember here is that while one arm of the military may have the major role in a particular conflict, ultimately in the end it will take a team effort to secure the victory.

So what makes operations not suitable to the use of air power as the military weapon of choice for coercive diplomacy? The most obvious are a lack of targetable centers of gravity, less the individual political leaders themselves, and a congested urban battlefield.

These two problems limit the inherent capabilities of air power. Even though air superiority was nearly assured in each of the aforementioned instances, it is the inability to hit targets in these urban areas without causing collateral damage or civilian casualties that ultimately made air power a poor choice. Without clearly targetable centers of gravity and

therefore the inability to strike “strategic” targets, the psychological effects are also diminished.

There are other examples throughout history where air power might have been the correct military arm for coercive diplomacy, but unfortunately it was used in an inappropriate manner. Certainly, the constrained use of American air power in Vietnam comes to mind. There have been many books written on this subject and many heated discussions on why air power really didn’t work in Southeast Asia, but the bottom line is anytime you use air power as a coercive weapon, you must not limit its employment, particularly at the cost of American lives. Many disagree to this day that it was the use of air power that finally brought the Vietnamese to the peace table in January of 1973, but among them won’t be the American POWs. They saw first hand the look of fear on the faces of their captors when the B-52s finally got to strike “strategic” targets—not individual trucks or people on bikes—in downtown Hanoi. They saw up close the psychological and coercive effects of air power—planned and used the way it should have been.

#### IV. THE FIVE “PRECEPTS”

*“In essence, air war requires broad, strategic thinking. The air commander must view war in totality—not in a sequential or circumscribed fashion.”*

Colonel Phillip S. Meilinger<sup>19</sup>

Having explored both the successful and improper uses of air power in different situations and under different circumstances we can derive five basic precepts that will help the operational commander in prosecuting a coercive air campaign. Some of these areas have

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<sup>19</sup> Meilinger, 55.

been written about before, but not solely in the context of coercive diplomacy.

Not discussed here but no less important to the overall success of an air campaign is the supposition that if the commanders are to develop strategies, select intermediate objectives, and execute operations, they must have a clear understanding of the strategic objectives and the degree to which they will be allowed to employ forces toward that end.<sup>20</sup> These objectives and limitations will not always be clear, particularly as the campaign progresses. The successful commander is the one that is flexible enough to adapt to the changes with the least amount of friction.

So, imbued with the correct objective foundation, some fundamental precepts can be delineated. These will not ensure victory in and of themselves but the absence of a rational calculus that does not take them into account will probably cause unnecessary casualties or possibly even defeat.

### Air Superiority

Air superiority is absolutely, without question, the essential prerequisite to the success of any air operation. Without it or the ability to attain it, any operation is fraught with danger. "To be superior in the air, to have air superiority, means having sufficient control of the air to make air attacks on the enemy without serious opposition and, on the other hand, to be free from the danger of serious enemy incursions."<sup>21</sup> Therefore, it is the condition that allows a nation to "exert its power over a foe with minimal air losses of its own, and without serious concern about the enemy's ability to contest for control of the air with its own air forces."<sup>22</sup>

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<sup>20</sup> Owen, The Balkans Air Campaign Study: Part 1, 6.

<sup>21</sup> John A. Warden, Air Campaign Planning for Combat (Washington D.C.: National Defense University Press, 1988), 13.

<sup>22</sup> Richard Hallion and others, Air Power Confronts an Unstable World (Washington D.C.: Brassy's, 1997), 5.



Implicit in this definition is the ability of air power to successfully suppress the enemy's surface to air threats as well. While stealth technology certainly reduces this requirement somewhat and aids in the destruction of these threats, the preponderance of air forces are still not stealthy and, not to be overlooked, much of the anti-aircraft artillery is non-radar controlled and therefore ambivalent to stealth technology.

Since 1939, "no country has ever won a war in the face of enemy air superiority, no major offensive has succeeded against an opponent who controlled the air and no defense has sustained itself against an enemy who had air superiority."<sup>23</sup> Its preeminence does not mean to imply that no other operations can take place until air superiority is achieved. Rather it may take the presence of other aircraft to "stimulate" surface threats or force the enemy to commit fighters to homeland defense and therefore expose them to possible destruction. So important is air superiority that the United States Air Force has made it its number one Core Competency.<sup>24</sup>

Therefore, as the air component commander, it is crucial to ensure friendly air forces gain and maintain air superiority. However this does not mean that in the initial stages of a campaign all forces must be allocated to just this one effort. Throughout the Gulf War, stealthy aircraft were able to roam the airspace pretty much at will. The F-117's stealth capability gave it the ability to strike strategic targets in the heart of Iraq coincident with the offensive counter-air and SEAD (Suppression of Enemy Air Defenses) campaign. This

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<sup>23</sup> Warden, 13. Rightfully so, this statement could be challenged by those who would site the conflict in Vietnam as one example where a country without air superiority eventually won. However, it is my contention that we were winning when we left, and the eventual downfall of South Vietnam had little, if anything, to do with U.S. forces. Arguably, Vietnam was a political loss not a military one.

<sup>24</sup> Ronald R. Fogleman and Shelia E. Widnall, Global Engagement: A Vision for the 21<sup>st</sup> Century Air Force (Washington D.C.: Department of the Air Force, n.d.), 10.

parallel warfare capability should be exploited wherever and whenever possible.

### Targeting

As we have discussed, air power's inherent capabilities allow it to be directed against a country's most vital centers immediately at the outbreak of hostilities. Industry, hardened bunkers, a country's transportation system, leadership and the enemy's army are all exposed to attack from the air in some form or another. The real key for the operational commander is determining the correct strategy-target match (means to ends) to get maximum effect for the minimum risk. For economy of force and efficiency, the strategic targets normally produce more "bang for the buck" than do the tactical targets.<sup>25</sup> As Admiral Smith said in the Bosnian conflict, "We have learned that stomping the ants is not the answer. We need to take out the anthill."<sup>26</sup> This quote sums up the essence of what the efficient use of military power should be. Although air power can and often times will be required by the CinC (Commander in Chief) or political establishment to hit individual troops or armor, these targets are at the wrong end of the proverbial food chain. The real efficiency in air power lies in its ability to hit the centers of gravity or critical vulnerabilities at the outset of the conflict, thus causing the enemy's fielded forces to wither and die. Along these same lines, in the Gulf War, the air campaign strategists used an alternative concept of warfare targeting based on control—the idea that an enemy organization's ability to operate as desired is ultimately more important than destruction of the forces it relies on for defense. As Brigadier General Deptula said,

"To render the enemy force useless is just as effective as eliminating the enemy force itself in terms of securing favorable conflict termination. Furthermore, controlling an adversary can be accomplished quicker, and with far fewer

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<sup>25</sup> Unfortunately, while the targeting of these tactical targets is extremely inefficient, too often it is their destruction that most people associate with winning. An explanation of the reality of this is a matter that must be fought and won in the information warfare arena.

<sup>26</sup> Atkinson, With Deliberate Force in Bosnia, 7.

casualties. Rather than the operative means to inhibit enemy activity, destruction should be viewed as one means to achieve control over enemy activity. In this approach, destruction is used to achieve effects on each of the systems the enemy organization relies on to conduct operations or exert influence not to destroy the systems, but to prevent them from being used as the adversary wants. Effective control over adversary systems facilitates achieving the political objectives that warrant the use of force."<sup>27</sup>

For obvious reasons this precept on targeting needs to be thought of in conjunction with that of the element of time and the synergistic effects of information warfare. It would be nirvana to find the one target that if destroyed or disabled would bring the enemy to their knees. Unfortunately, rarely if ever is there such a target. It becomes important then to understand the differences in effects based versus destruction based targeting. Once again quoting Deptula,

"The process of planning for effects is complex. Planners in conjunction with intelligence must determine which effects on each enemy system can best contribute to the fulfillment of the military and political objectives of the theater campaign. This depends upon the specific situation, political and military objectives, enemy vulnerabilities, the target systems themselves, and weapon system capabilities. Since a campaign plan is highly dependent on the weapon systems available, an effective plan must extract maximum impact from those systems not in terms of absolute destruction of a list of targets, but in terms of effects desired upon target systems."<sup>28</sup>

This type of planning has led to a fairly new way of looking at targeting in an air campaign. Effective targeting today should grow out of the mindset that asks the question, "How do I impose force against an enemy's systems so that every effort contributes to the military and political objectives of the coalition or alliance (Economy of Force)?" One way is to start the planning by examining potential centers of gravity, their constituent operational

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<sup>27</sup> Deptula, 7.

<sup>28</sup> Ibid., 8.

systems, and then the set of individual targets that make up each system. Assessment of whether to continue the attack on a particular target set or not should be based on whether the desired effects have been achieved on the system. Whenever those desired effects have been achieved, move on to another center of gravity or operational system regardless of whether the entire target set has been destroyed or not. In other words, the individual targets in a particular set are only important while the system is still operating or later if the system is restored to an operational state.<sup>29</sup>

Intelligence must play a key role in any targeting situation, but particularly here where the BDA (battle damage assessment) often cannot be confirmed by the traditional method of imagery. All intelligence sources must be exploited to correctly contribute to the success of the targeting problem and consequently the overall air campaign.

### Information Warfare

Arguably one of the newest variables in warfare is that of the information revolution. Sir Winston Churchill once said, "Air power is the most difficult of all forms of military force to measure, or even to express in precise terms."<sup>30</sup> Realizing this fact is half the problem. As the air component commander you must be able to articulate your measures of effectiveness (MOEs) to the public. This is not as easy as it might sound as this has to be done on a level where the average citizen can understand not only what has been hit or destroyed, but what that destruction means to the overall operation, and moreover, what effect that will ultimately have on the outcome and length of the campaign. Unfortunately the commander rarely

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<sup>29</sup> Ibid., 10.

<sup>30</sup> Chief of the Air Staff, Royal Air Force Air Power Doctrine (AP 3000 – 2<sup>nd</sup> Edition)(Printed in the United Kingdom for HMSO, n.d.), 13.

succeeds in this endeavor. In today's world of instant information, this part of the operation must take on a higher precedent than ever before.

As discussed earlier, in the Bosnia conflict, nothing General Ryan did was without thought as to how it would appear on the news later that day, even to the point of having a "dump target" within view of the cameras so people would at least be able to see something blow up.<sup>31</sup> He realized that this newest and most powerful form of warfare was so important to the overall outcome that the responsibility of ensuring success could not be delegated down to a lower level of command.

It's a given that when it comes to the coverage of a war, or any news for that matter, sensationalism sells. The strategically adept commander will understand and accept the fact that no matter where you are in the world from now on, there will always be news people there. Since most military commanders have little or no experience with the media, we invariably let the reporter's quest for the spectacular or controversial story get to the forefront at the expense of the correct message.

Ever since the first videos were shown in the Gulf War, cockpit videos have been the media's method of choice as far as the air war is concerned. The problem with this is that the often called "Nintendo" like war this presents is the wrong picture as to what is really happening in the air and what effect those bombs are having on the morale and psyche of the enemy. It's at this time that the air commander should have the "volume up"—literally and figuratively—and be informing the people of what effects those individual bombs are having on the overall campaign—our MOEs! These single bomb "video shows" perpetuate a sense

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<sup>31</sup> Atkinson, With Deliberate Force in Bosnia 7.

of ineffectiveness for the overall operation, which leads to the impression that the air plan is not as successful as it might be.

So, as the air commander, it is necessary to know what story needs to be told and then to make sure that that is what is portrayed. To depend on the public affairs officer, who has no hands-on credibility, to tell your story is a mistake. You must also resign yourself to the fact that in today's world, any mistakes made in targeting or the delivery of precision weapons that cause collateral damage or civilian casualties (sometimes even enemy casualties) will end up in the news. Any delay or failure by the military to explain the situation may eventually undermine your ability to prosecute the campaign as it should be prosecuted. Public opinion is formed by what they see on the six o'clock news and the pressure they can bring to bear, often through opinion polls, will carry great weight with our civilian leadership.

#### Alliances and Coalitions

Alliances and coalitions have nearly always been a part of war. In today's environment though, they play a much larger role than they did even 10 years ago. Since the fall of the Soviet Union and the resultant mono-polar rise of the United States as the dominant world power, coalitions and alliances have become the political and economic weapon of necessity. This is largely for two reasons. First, the public support gained by the approval of world organizations like the UN, or area alliances like NATO, is nearly becoming a prerequisite to the use of military force. This helps to reassure the world that any perception of a single country's quest for hegemony is not in the works. Second, while not necessarily required, many times it is in our best interest to work with a coalition to gain basing and over-flight rights.

While on the surface this appears to be a good thing, there are some rather long strings attached. For one thing it has forced the military commander into making tougher and potentially more politically charged decisions than they have had to in the past. Now nearly every decision that is made with respect the air campaign, including what targets to hit and when to hit them, has to be approved, either overtly or tacitly, by most if not all of the coalition partners.<sup>32</sup> This all takes time—time which arguably might not be available. Also today, the actions of one nation—one commander—speak for the whole coalition. Therefore, the air commander must be more astute about the countries than he may have been in the past. He must also take into account the cultural variables and baggage that each country—including the United States—brings with them. The air commander must also realize that patience must be exercised in any coalition operation from now on. Additionally, to the maximum extent possible, save for security reasons, he should take every effort to ensure there is an open channel for the effective and unhindered flow of information.

Coalitions like those in the Gulf War and the Bosnian conflict are here to stay. Although it took a while to understand each other in these two cases, in the end the strength of the whole was greater than the sum of its parts and worth the effort to make it succeed.

### Psychological Operations

Liddell Hart said, "Air power is, above all, a psychological weapon--and only short-sighted soldiers, too battle-minded, underrate the importance of psychological factors in war."<sup>33</sup> Unless you have been on the receiving end of a bombing, effectively explaining the psychological advantages of air power is very difficult if not impossible. That does not mean

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<sup>32</sup> This is particularly the case at the outset of an air campaign and not when or if the ground troops are in contact and need the type of close air support that simply must rely on the premise of decentralized execution.

<sup>33</sup> Westenhoff, 26.

that the air commander should not try to understand these effects and exploit them to the best of his ability.

Who can doubt the effect of 39 days of continuous bombing on the psyche of the Iraqi army? When the Iraqi General Wafic Al Sammarai paid an inspection visit to a 15,000 man Iraqi division, why did he only find 34 men left?<sup>34</sup> Or why did those Iraqi pilots fly to Iran? Why were there over 80,000 Iraqis that surrendered, even to a helicopter, after the start of the ground offensive? What about those frightened looks on the faces of the prison guards in Hanoi? Can we really discount the incredible effects the human body is subjected to when one B-52 drops 108 bombs over a path 100-yards wide and nearly a mile long? If truth be known, the ultimate reason for all of these actions is the psychological fear brought about by air power.

Not often thought of in the large scheme of the air campaign but vitally important to the coercive effort of air power, the competent air component commander must and will exploit this effect of air power to it fullest. This precept should not be construed as advocating the bombing of civilians. On the contrary, in most cases one must do whatever it takes to avoid civilian casualties. The trend in today's wars seems to be that they are fought over the actions of the leaders of the country and not the countrymen proper. Even as far back as September 1915 the damaging effects of bombing civilians was realized. It was then that the French notified the inhabitants of Sofia, Bulgaria:

Our aircraft observe the rule of bombing *only military establishments and those serving the national defense*. The German Zeppelins and aeroplanes, however, drop bombs on Salonika and Bukharest [*sic*], assassinating old men, woman, and children... Such acts, such crimes, call for vengeance...<sup>35</sup>

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<sup>34</sup> Ben Loeterman and Eammon Mathews, Frontline The Gulf War, (Produced by WGBH Boston, WTVS Detroit, WPBT Miami, WNET New York and KCTS Seattle, 1996), video tape recording.

<sup>35</sup> J. M. Spaight, Air Power and War Rights (London: Longmans, Green and Co., 1924), 199.



We would be wise to learn from this example and that of the British in World War II when the German bombing of London did nothing but solidify the will of the people to resist with any and all means.

There are many other valuable psychological lessons to be learned and techniques to be exploited. The air component commander must become familiar with them and conversant in the timing and extent of their use to ensure the success of the air campaign. The precision, speed, and lethality of today's air power potentially leaves every informed enemy of the United States psychologically fearful of being on the receiving end of our fury.

The intent of this paper is not to imply that these five precepts are all inclusive. But they can be used by the operational air component commander as a guide to help develop and employ air power in the best way possible to achieve the desired coercive result. They are born from the lessons learned, both good and bad, from the times when air power was successful and the times when air power was used improperly.

So while working under the realization that the ideal world of clearly articulated political and diplomatic objectives will never be found, the air component commander must be able to reach in his tool bag and pull out some useful tools to augment his air campaign strategy. Those tools can be found in the proper application, planning and employment of air power in gaining and maintaining air superiority; correctly and precisely targeting the correct critical nodes; exploiting the information warfare environment to help achieve our objectives realistically and truthfully; working harmoniously and efficiently with our coalition partners; and finally, taking advantage of the psychological effects inherent in air power to ensure

victory. If put together properly these precepts will help air power be an effective military weapon of first resort for coercive diplomacy.

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